
Numisys Features

GENERAL CHARACTERISTICS

	Numisys	Comments
<i>Operating System</i>		
Workstations	WIN 95	NT4.0 for NUMISYS on request
Server	NOVELL, NT	
Audio DataBase	Paradox Tables	SQL server soon
Network	Ethernet 10BT, 100BT FDDI ATM	Depending on number of workstations and existing network
<i>Audio Format</i>		
Audio Input/Output	Analog or AES	
File Format	MPEG 2 Stereo 128, 192 Kbit/s	Other MPEG format on request
Media supported	HD, CD-ROM, Audio CDs	Or any other computer media for archiving
<i>Limits</i>		
Max Number of Workstations	75	
Max Titles supported	100 000	
HD Audio Archive	Server technology	
Audio CD Archive	20x500 CDs	
CD-ROM Archive	10x500 CDs	
<i>Hardware</i>		
Workstations	Pentium 166 16 MB RAM 1GB HD	Minimum configuration 32 MB RAM required for DAVID softwares
Audio Servers	Main Manufacturers: COMPAQ, HP, IBM, ...	
Audio Board	DIGIGRAM PCX9, PCX20, PCX80	

DATABASE		
	Numisys	Comments
<i>Types of Data</i>		
Identification	✓	
Criteria & Categories	✓	
Author, modification, dates	✓	
Music rights	✓	For billing facilities
Parameter for audio rotation	✓	Used in automatic scheduling
Physical media	HD, CD, CD-ROM, Lines, Text, Relays	
Audio Cue points	Start, Fade-in, Intro, Bridge, Link, Fade-out, End	
Associated Text	✓	Can be displayed on Air
Associated Memo	✓	Can be displayed on Air
Scheduling history reports	✓	
Access rights	✓	Restricted display & operations according to login
<i>Ergonomy</i>		
<i>Database Access Module</i>		
Drag & drop interface with all softwares	✓	Interface with recorder, scheduling, archiving, On Air softwares
Simple & quick requests	✓	Based on main indexes: title, artist, category, tape N°
Advanced requests using logical operation	✓	Combination on any of the 60 database fields
User defined request & display	✓	Size, position,
Fully configurable reports	✓	On line selection of fields displayed
Direct access to monitoring module	✓	Drag & Drop or right mouse button
Dynamic update & refresh according to multi-user operation	✓	
Access rights (change login & group)	✓	
<i>Import / Export</i>		
<i>Database Access Module</i>		
Import of audio data	✓	ASCII export from other databases
Import of audio files	✓	MPEG audio files
Import of audio texts & memo	✓	ASCII text files
Export in *.CSV files	✓	Export of data from audio database to Microsoft softwares

Monitoring of Audio

	Numisys	Comments
<i>Recorder Module</i>		
Direct connection with database & scheduling	✓	Drag & Drop or right mouse button
Selectable display	✓	Enlarged, Reduced, Top-Bar
Compatible with HD, CD-Roms & audio CDs	✓	
Audio level adjustment	✓	Recording & monitoring
Cue to any position in audio	✓	With sidebar and remarkable cue points: begin, bridge, end, marks
Definition of remarkable cue points (intro, bridge, link, end)	✓	On the fly

ACQUISITION

	Numisys	Comments
<i>Recorder Module</i>		
Access from database	✓	With simple recording button
Quick record	✓	Auto-record mode, Similar to a simple tape recorder
Adjustment au audio input	✓	With LED display in RECORD mode
Display of audio level	✓	With LED display in RECORD or PLAYBACK mode
Mark during recording	✓	Unlimited number usable with DiGas Audio Editor
Data entry during recording	✓	Possibility to update title, category, texts, memo during recording
Editing while recording	✓	Possibility to start audio editing from the same or another workstation while the audio master is being recorded
Reservation of space	✓	5 minutes of spaces are reserved on audio server to ensure minimum recording
<i>Automatic Recording</i>		<i>Intake</i>
Nb stereo audio channels per PC	4	
Telephone interface	<3	Remote control of Audio recording using DTMF tones
ISDN interface	<3	Remote control of Audio recording using DTMF tones S0 connector
Online setup of recording mode	✓	Telecom, relay, scheduler
Relays triggers	✓	START/STOP/MARK
Audio level detection	✓	START/STOP with configurable audio levels
Time scheduler	✓	Advanced schedule editor One schedule per audio channel
<i>Recording of Audio CDs</i>		<i>Trackfiler</i>
MPEG or linear compression	✓	On line configuration with default setup by user
Direct transfer from CD to disk	✓	
Monitoring of audio CDs and audio files	✓	Using local CD-ROM player and audio board
Definition of cue points	✓	Begin, Intro, Bridge, Link, End
Edition of data	✓	Title, Artist, ...
Import of Data	✓	From an ASCII file description
Synchro with logical database	✓	Between logical definition and physical audio tracks
Export to external database	✓	With on line configurable reports

Audio Editing

	Numisys	Comments
<i>DAVID Softwares</i>		<i>Refer to DAVID Product Information</i>
EdiGas (one stereo channel)	✓	
EdiMix (two stereo channels)	✓	
Hardware controller (EdiDesk)	✓	
Multitrack	✓	
Audio Conversion (linear / MPEG)	✓	
Time stretching	✓	

Scheduling		
	Numisys	Comments
<i>Multi-user</i>		
Restricted access to templates	✓	Typical playlist templates are created by authorized people only
Restricted access to shows, blocks	✓	News, Music, Commercial departments
Real time update of edited schedules	✓	On all workstations working on the same schedule
<i>Playlists</i>		
Multi-program management	✓	Definition of cabinets per program. Possibility to share common playlists: filling, emergency
Daylists	✓	Adapted to global schedule of a radio program
Auxiliary lists	✓	Adapted to Commercial & News breaks
Filling lists	✓	
Emergency lists	✓	
Lists of jingles (F KEYS)	✓	
Audit of playlists before transmission	✓	Check of audio integrity, restrictions, Audio CD management
Copy of lists	✓	
Management of transmission reports	✓	Reliable report of what has been really transmitted with the cause of exception (failure, human operation, ...)
Export of transmission reports (*.CSV)	✓	Possibility to process the report for maintenance, billing or traffic use
<i>Templates</i>		
Definition of models for all types of lists	✓	Typical playlist templates
<i>Characteristics</i>		
type of title to be selected	✓	In auto or live assist mode Based on category & criteria or title identification
fixed time	✓	Show, block or audio step replayed at a fixed time
schedule auto	✓	Block or step filled with automatic scheduling
rules for rotation: exclusion by: - title - artist - category and by - show - block - time period	✓	In automatic scheduling
Auto mode	✓	Transmission of show, block, step in auto mode (steps linked together)
emergency	✓	Use of emergency playlist in case of failure
filling	✓	Use of filling playlist in case of fixed time
Triggered by relays	✓	

Scheduling

	Numisys	Comments
<i>Scheduling</i>		
Assisted selection according to pre-defined type of step	✓	
Automatic selection according to rotation & pre-defined type of step	✓	
Advanced import of commercial blocks	✓	Interface with external commercial planning software
Advanced import of music playlists	✓	Interface with music planning software (SELECTOR, MUSIC MASTER) with automatic import of title used
Automatic filling of music steps according to playlist import	✓	
Simple playlist editing	✓	with drag & drop interface with audio database
Synchro with playlist template	✓	

Shaper		
	Numisys	Comments
<i>Single audio track</i>		
Drag & drop interface with playlists	✓	From On Air workstation
Definition of audio cue points for transmission: Start, Fade In, Fade Out, Link, End	✓	With wave display and audio monitoring facility
Audio Level adjustment	✓	
Loop function	✓	For accurate Time Code location
Monitoring of audio	✓	With PCX audio boards
Update of current playlist	✓	For use in real transmission
<i>Mixing of two tracks</i>		
Drag & drop interface with playlists	✓	From On Air workstation
Dynamic link with playlist: NEXT, PREV step	✓	From On Air workstation
Definition of audio cue points for transmission: Start, Fade In, Fade Out, Link, End	✓	With wave display and audio monitoring facility
Audio Level adjustment	✓	
Loop function	✓	For accurate Time Code location
Monitoring of audio	✓	With PCX audio boards, with mixing facilities
Insertion of new step	✓	Selection from database, and update of on air playlists
Update of current playlist	✓	For use in real transmission

Broadcast

	Numisys	Comments
<i>Environment & Main features</i>		
Selection of current program	✓	Among program defined
Use of daylists (main schedule)	✓	Among all playlists validated for transmission
Single audio channel: full automatic	✓	
Advanced management of crossfades in auto mode	✓	Defined with shaper module
4 audio channels: live assist triggered by mixing console	✓	With dynamic audio routing from any types of audio player: HD, CD, External lines
Fader start interface with auto routing of audio signal	✓	Relay, Opto-couplers
Audio CD Interface	✓	With PIONEER Juke-box
Management of CD-ROM library	✓	With automatic audio cache management
Control of remote players (DAT, CD, cartridge)	✓	With relays, Opto, RS232
Conditional steps for commercials or news inserts	✓	Triggered by relay contacts
Fixed time management with filling lists	✓	For news, commercials and splitted programs
Synchro with external clock (Gorgy, DCF77)	✓	With update of all workstations of the system
Use of Auxiliary lists (news, commercials, ...)	✓	To be inserted in the main list or affected to an instant Key
Nb of jingle channels	< 7	
Replay of single jingles	✓	
Replay of jingles selected in a list	✓	
Replay of jingles with auto rotation	✓	
Direct mail with editing room (Hot Box)	✓	To transfer last minute editing with text and memo attached
Generation of actual transmission report	✓	

Broadcast		
	Numisys	Comments
<i>Ergonomy</i>		
Full drag & drop operation	✓	Compatible with touch screen interface
Intuitive On Air display for immediate supervision of transmission	✓	
Display of Time Codes: Remaining, Intro, Bridge	✓	
Shortcut to main features: NEXT, SKIP NEXT, SAME, RECUE	✓	
Shortcut with right mouse button	✓	LOAD LIST, LOAD to AN INSTANT KEY, SET NEXT STEP
Dynamic update of playlists (del, move, insert)	✓	
Audio monitoring of items displayed on screen	✓	With SHAPER or RECORDER module
Direct cueing with shaper module	✓	PLAY, STOP, LINK points
Display of available text & memo	✓	By a simple click on the TEXT/MEMO icon
Display of list attached to an instant key	✓	Selection of current step, Display of step on air, Auto-rotation of steps in the list

Administration

	Numisys	Comments
<i>Maintenance</i>		
On line backup of database	✓	To any removable media or remote server
Import of audio titles	✓	Audio files + description from third party software
Assisted deletion of titles	✓	
Management of Audio CD-Jukeboxes	✓	Assistance to locate Audio CDs loaded in the Jukeboxes
<i>Access Rights</i>		
Definition of groups with limited access to audio & playlists	✓	
Definition of users	✓	Member of one or several groups
Definition of passwords for each users	✓	

Archiving

	Numisys	Comments
<i>Archive</i>		
Backup of audio titles	✓	Without deletion in central library
Archive of audio titles	✓	With transfer from central library to external media
Exchange of audio titles via ISDN lines	✓	With automatic connection to remote sites
Optional transfer of audio files	✓	
Selection of external media	✓	Any WINDOWS/DOS media: MOD, CD-ROM, removable disk
Manual or scheduled process	✓	
Automatic archiving according to pre-defined criteria	✓	Ex: Daily backup of recorded items, or archive of old records.
Automatic synchronization with backup server	✓	Via LAN or WAN connection
Archive/Backup of playlists	✓	Playlist + Audio Titles + Audio files
Audit of data before processing	✓	
<i>Desarchive</i>		
Selection of archive source	✓	Local CD-ROM, Jukebox CD-ROM, MOD, removable disk, remote server
Selection of audio titles/playlists	✓	
Optional transfer of sounds	✓	
Optional change of audio media	✓	Ex: from MOD/CD-ROM to server
Automatic restore of predefined backup	✓	Ex: Daily backup of recorded items

CD-ROM Management

	Numisys	Comments
<i>Local CD-ROM printer</i>		
CD-ROM printing of audio titles		With archiving software
Use of CD-ROM archive		For restoring purpose
<i>CD-ROM Juke_box</i>		
On line archive		2500 hours of MPEG audio files in one PIONEER DRM5004X
Management of audio cache		Prevent from conflict between CD-ROMs & players
Priority management between tasks		On Air, Editing, Monitoring
Automatic transfer from JB to audio cache according to scheduled items		
Direct use from archiving		
Direct use from recorder		Monitoring from scheduling, administration
Direct use from editing station		
Direct use from on air station		